

### REMARKS

Claims 109-156 are pending, with claims 109, 125, and 141 being independent. Claims 1-108 have been cancelled.

#### Rejections under 35 U.S.C. §103(a)

Claims 109-156 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Gerace (U.S. Patent No. 5,848,396) in view of Graham (U.S. Patent Publication No. 20060122884). Applicant traverses the rejection.

Gerace fails to support the rejection of claims 109-156 because Gerace fails to disclose at least one element of claims 109-156. Furthermore, it would not have been obvious to one of ordinary skill in the art to modify Gerace to arrive at the subject matter recited by claims 109-156. Applicant also asserts that the deficiencies of Gerace are not cured by Graham.

#### Claim 109

For at least the reasons set forth below, Gerace fails to support a rejection of claim 109 under 35 U.S.C. §103(a) because Gerace fails to disclose at least one element of claim 109, and it would not have been obvious to one of ordinary skill in the art to modify Gerace to arrive at the elements recited by claims 109.

At pages 4 and 5 of the office action the Examiner states:

Gerace does not explicitly disclose for each identified concept, content-concept performance, and corresponding to the concept, using the concept performance, or performance based on concept.

However, Gerace discloses tracking ad performance (12:55-65; 33:35-34:30) and improving ad performance targeting (20:8-20; 18:10-26). Gerace further discloses that ads are known for their type of information (3:4-7; 12:25-30) and that ads are placed based on the relevance of ad content to webpage content (16:35-55; 10:60-65; 14:25-35). And, Gerace discloses that the "Media (visible/playable here)" where an ad is shown is tracked (33:55-60). Also Gerace tracks every ad presented to a user and with what other content on the page the ad

was presented (6:45-7:45). And, Gerace discloses that ads are presented so to be optimized both for relevant content and style (5:20-25).

Gerace further discloses correlating page content and ad content:

"A Page object 35a cross references a User Interface Object 37c which specifies which Page Display Object 35c and which agate information (content and presentation) is appropriate for the current user. Page Data Objects 35b hold the agate or other data to be displayed to end users. Included are advertisements (objects themselves) which may be integrated into the agate data. Preferably advertisements are positioned along the periphery (i.e., above, below, left or right) of the agate data, as defined by a respective Page Display Object 35c. Accordingly, Page Data Objects 35b support Page Display Objects 35c which outline the possible screen content and presentation formats in which agate data advertisements are to be displayed." (7:18-37).

Based on these recorded details, program 31 constantly and automatically tailors screen views (content and presentation) and advertisement selection (subject matter and presentation) for the user. (17:1-17). (emphasis removed).

The Examiner states that, based on the foregoing, "it is obvious that Gerace can track performance for different page content/concepts/topics and ad content relevance," and that "one would be motivated to do this to better target relevant ads." Applicant disagrees.

First, applicant notes that the Examiner appears to analyze a series of phrases that are each selected from different locations of claim 109 and to summarily address these phrases without considering their context, which is improper. For example, the Examiner appears to analyze "using concept performance" in isolation from the text that this phrase modifies (i.e., "modifying ... the initial advertisement performance information for an advertisement using the concept performance information.")

According to MPEP 2106, "when evaluating the scope of a claim, every limitation in the claim must be considered. **USPTO personnel may not dissect a claimed invention into discrete elements and then evaluate the elements in isolation.** Instead, the claim as a whole must be considered." **"This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made."** (emphasis added). Diamond v. Diehr, 450 U.S. 175, 188-89, 209 USPQ 1, 9 (1981). Thus, analyzing the phrase "using concept performance," without considering the process step for which the "content performance" is used is improper. Accordingly, applicant requests that the

phrases “for each identified concept, content-concept performance, and corresponding to the concept, using the concept performance, or performance based on concept,” be analyzed in view of the claim as a whole.

Second, even assuming that the Examiner's interpretations of the claim language and Gerace are proper (which applicant does not concede), claim 109 is not rendered obvious by Gerace. For example, in view of Gerace, it would not have been obvious to one of ordinary skill in the art to modify “the initial advertisement performance information for an advertisement using the concept performance information,” as recited by claim 109, where the advertisement performance specifies “a measure of performance computed based on previous presentations of the advertisement,” and the “concept performance information represent[s] an aggregate performance of advertisements that were presented with the document and corresponding to the concept.”

At pages 2 and 3 of the office action, the Examiner states “Gerace discloses a method, comprising ... modifying ... the advertisement performance information for at least one of the one or more advertisements using the determined content concept performance information for the content concept associated with the at least one of the one or more advertisements (18:10-26).”

At column 18, lines 1-26 Gerace recites:

As discussed above, sponsors have the ability to place ads according to demographic profile. To do so, advertisers/sponsors complete a template, (preferably in the Ad Series Objects 33c) which allows them to list certain criteria as required, and to weight other criteria by importance. To ensure ads are shown to the appropriate target users, the sponsor then selects a minimum total weight which a user's demographic/psychographic profile must achieve before the advertisement is shown to the user.

To ensure that sponsors achieve the optimal result from the ads they place, program 31 combines regression analysis with the above weighting technique to achieve real-time, automatic optimization as discussed previously. Under this auto-targeting system, an ad package is shown to general users. After a large number (e.g., 10,000) hits, program 31 runs a regression on a subject Ad Package Object 33b to see what characteristics are important, and who (type of user profile) the ad appeals to the most. Program 31 then automatically enters weighting information based on that regression to create a targeted system and runs the advertisement (Ad Package Object 33b) again in front of this new targeted group. Program 31 then runs a regression every 10,000 hits, for example,

including a group of 500 general people as a control, and adjusts the weighting. This continues until the Ad Package is exhausted (i.e., the number of hits and click throughs are achieved.

This portion of Gerace does not teach, describe, or suggest “modifying, by at least one processor, the initial advertisement performance information for an advertisement using the concept performance information for an identified concept corresponding to the advertisement.” At most, this portion of Gerace discloses that “after a large number (e.g., 10,000) hits, program 31 runs a regression on a subject Ad Package Object 33b [i.e., an advertisement] to see what characteristics are important, and who (**type of user profile**) the ad appeals to the most. Program 31 then **automatically enters weighting information based on that regression** to create a targeted system and runs the advertisement.”

As described by Gerace, advertisers are provided “the ability to place ads according to demographic profile” by “completing a template, (preferably in the Ad Series Objects 33c) which allows them to list certain criteria as required, and to weight other criteria by importance.” At column 12, lines 28-31, Gerace notes that “**the sponsor specifies** in Ad Series Object 33c the required and/or preferred **psychographic and/or demographic criteria** and relative importance (e.g., weight) with respect to each criterion.” Thus, the criteria that are weighted by Gerace are “psychographic and demographic criteria” for target users. Therefore, the “automatically enter[ed] weighting information” of Gerace is weighting information for “psychographic and demographic criteria,” which is not the same as the “initial advertisement performance information” because the “psychographic and demographic criteria” of Gerace **do not** specify “a measure of performance computed based on previous presentations of the advertisement,” as recited by claim 109. Rather, the “psychographic and demographic criteria” represent “characteristics of users.” Gerace at Col. 2, line 47. These user characteristics are for targeting advertisements rather than measuring performance of advertisements. Accordingly, “automatically entering weighting information [for psychographic and/or demographic criteria] based on that regression,” does not teach, describe, or suggest “modifying ... the initial advertisement performance information for an advertisement using concept performance information for an identified concept corresponding to the advertisement,” as recited by claim 109.

Gerace also fails to provide any teaching that would make it obvious to one of ordinary skill in the art to modify Gerace to arrive at the method of claim 109. For example, based on the disclosure of Gerace, it would not have been obvious to one of ordinary skill in the art to modify “the initial advertisement performance information for an advertisement using the concept performance information for an identified concept corresponding to the advertisement,” as recited by claim 109.

As discussed above, the Examiner states that, for the reasons provided at pages 4 and 5 of the office action, “it is obvious that Gerace can track performance for different page content/concepts/topics and ad content relevance,” and that “one would be motivated to do this to better target relevant ads.” Applicant disagrees.

Even assuming that the Examiner's interpretation of Gerace is proper (which applicant does not concede), absent the teaching of the present application, disclosure of “tracking ad performance ... improving ad performance targeting ... that ads are known for their type of information ... ads are placed based on the relevance of ad content to webpage content ... where an ad is shown is tracked ... track[ing] every ad presented to a user with what other content on the page the ad was presented ... [and that] ads are presented so to be optimized both for relevant content and style,” would not lead one of ordinary skill in the art to modify “the initial advertisement performance information for an advertisement using the concept performance information for an identified concept corresponding to the advertisement,” where the “advertisement performance information for each advertisement specif[ies] a measure of performance computed based on previous presentations of the advertisement,” and where “concept performance information represent[s] an aggregate performance of advertisements that were presented with the document and corresponding to the concept,” as recited by claim 109.

The office action recites that “one would be motivated to do this to better target relevant ads.” While “targeting relevant ads” may be a goal of advertisement targeting, there are many different ways in which one of ordinary skill in the art could attempt to achieve better “targeting” of “relevant ads.” Thus, the goal of “better targeting relevant ads” alone does not provide “a clear articulation of the reason(s) why the claimed invention would have been obvious,” as required to support a prima facie case of obviousness. MPEP § 2143.

For at least the reasons provided above, Gerace fails to support a rejection of claim 109 under § 102 or § 103, because Gerace fails to describe at least one element of claim 109, and, based on the disclosure of Gerace, it would not have been obvious to modify Gerace to arrive at the subject matter of claim 109. Accordingly, applicant asserts that claim 109 and its dependent claims are allowable over Gerace.

The Examiner has noted that Graham “discloses concept/topic for documents and presenting relevant ads (Fig. 1c; 9a; claim 27) and also relevance scores ([32, 39, 47-49]).” Even assuming that the Examiner’s interpretations of the cited portions of Graham are proper (which applicant does not concede), Graham still fails to cure the deficiencies of Gerace described above because the disclosure of presenting relevant ads and the disclosure of relevance scores are not the same as “modifying ... initial advertisement performance information for an advertisement” using “aggregate performance of advertisements that were presented with the document” and that correspond to the concept. For example, none of the relied-upon portions of Graham disclose performance measures (e.g., click-through-rates) for advertisements that have been presented with a particular document. Rather, the relied-upon portions of Graham note a manner in which concepts of an advertisement can be compared to concepts associated with documents and/or concepts associated with a user to determine concept similarity.

Claim 27 of Graham recites:

An apparatus for determining if an advertising is relevant to a web document, the apparatus comprising:  
at least one memory having program instructions;  
at least one processor configured to execute the program instructions to perform operations of:  
identifying one or more advertisement-related concepts corresponding to the advertisement;  
analyzing content of the web document to identify one or more document-related concepts for the web document;  
comparing the one or more advertisement-related concepts to the one or more document-related concepts to determine if a match exists; and  
determining that the advertising is relevant to the web document if a match exists.

According to claim 27, “advertisement-related concepts” are compared to “document-related concepts to determine if a match exists,” and a determination is made “that the

advertising is relevant to the web document if a match exists.” Graham’s “comparing ... advertisement-related concepts to ... document-related concepts to determine if a match exists,” even when combined with the disclosure of Gerace, does not result in the elements of claim 109. For example, the combination of Gerace and Graham still fails to disclose “**modifying**, by at least one processor, the **initial advertisement performance information** for an advertisement **using the concept performance information** for an identified concept corresponding to the advertisement,” as recited by claim 109 because claim 27 provides no suggestion that any advertisement performance information is modified.

The Examiner has also cited paragraphs 32, 39, and 47-49 of Graham in support of the rejection of claim 109. Paragraph 0032 recites:

[0032] FIG. 1C illustrates a simplified diagram of a representative search technique in a particular embodiment according to the present invention. This diagram is merely an example which should not limit the scope of the claims herein. One of ordinary skill in the art would recognize many other variations, alternatives, and modifications. FIG. 1C shows a first portion of an example document 105, viewable by a user. Document portion 105 includes several highlighted words. These highlighted words comprise a context that causes the display of a first advertisement 107, "Ad 345" because of the correspondence between the concepts in this advertisement and the concepts in the contents of the document portion 105. Later, the user views a new area of the document, document portion 109. These highlighted words comprise a context that causes the display of a second advertisement 111, "Ad 938" because it is now the most relevant advertisement to the concepts being viewed by the user. If the use of only the highlighted words does not yield an advertisement with a sufficient relevancy score,  $R_j$ , other phrases contained in the viewing area can be used as the matching criteria for the collection of advertising concepts. ...

Thus, paragraph 0032 of Graham notes, for example, that specified words on a document “comprise a context that causes display of the first advertisement 107, “Ad345” because of the correspondence between the **concepts in this advertisement** and the **concepts in the contents of the document portion 105.**” Accordingly, paragraph 0032 is describing selection of advertisements based on their relevancy “to the concepts being viewed by the user,” and paragraph 0032 fails to teach or suggest that “advertisement performance information ... specifying a measure of performance [and] computed based on previous presentations of the advertisement,” are modified “using

concept performance information” that represents “an aggregate performance of advertisements that were presented with the document and corresponding to the concept.”

Paragraph 0039 similarly fails to cure the deficiencies of Gerace. Paragraph 0039 recites:

[0039] In a particular representative embodiment according to the present invention, advertising can be targeted based upon the user's concepts of interest and how relevant these concepts are for a particular document. Relevance can be determined using a scoring or other method as described below. This information, in conjunction with the actual content of the document, can be used to target advertising to users. Concepts, which define sets of interests, can be collected from user input or other mechanisms. In a presently preferable embodiment, user privacy can be maintained because user profiles are not shared with advertisers. User profiles can be stored locally on the client computer, or at an ISP server, or a proxy service, for example. In some specific embodiments, advertisers can be provided statistical information recorded by the user's browser, for example. ...

According to paragraph 0039, “advertising can be targeted based upon the user's concepts of interest and how relevant these concepts are for a particular document.” However, targeting advertisements based on relevance does not teach, describe, or otherwise suggest any modification of advertisement **performance measures** for an advertisement that was **previously presented** with the document, using “aggregate **performance of advertisements that were presented with the document**” and that correspond to the concept.

Paragraphs 0047-0049 also fail to cure the deficiencies of Gerace. Paragraphs 0047-0049 recite:

[0047] The  $c_i$  value provides a bias to the  $S_{i,j}$  value towards higher scoring user concepts. Given all relevant user concepts and all relevant advertising concepts, a matrix can be constructed having similarity values for each combination of user/advertising concepts. Table 1 illustrates a representative example of such a matrix in one specific embodiment.



TABLE 1

<u>Comparison matrix</u>						
Concept/Ad	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	...	C <sub>i</sub>	Relevancy
A <sub>1</sub>	S <sub>1, 1</sub>	S <sub>2, 1</sub>	S <sub>3, 1</sub>	...	S <sub>m, 1</sub>	R <sub>1</sub>
A <sub>2</sub>	S <sub>1, 2</sub>	S <sub>2, 2</sub>	S <sub>3, 2</sub>	...	S <sub>m, 2</sub>	R <sub>2</sub>
A <sub>3</sub>	S <sub>1, 3</sub>	S <sub>2, 3</sub>	S <sub>3, 3</sub>	...	S <sub>m, 3</sub>	R <sub>3</sub>
...	...	...	...	...	...	...
A <sub>j</sub>	S <sub>1, n</sub>	S <sub>2, n</sub>	S <sub>3, n</sub>	...	S <sub>m, n</sub>	R <sub>n</sub>

[0048] In this representative example, a collection of the relevant user concepts, {C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, . . . , C<sub>i</sub>}, and relevant advertising concepts, {A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub>, . . . , A<sub>j</sub>} are included. The individual similarity value is represented for each **comparison between user concept and advertising concept** as S<sub>i,j</sub>, where i is the user concept index and j is the advertising concept index. Next, in a step 424, a **"best" advertising concept given all of the user concepts can be determined**. In this step, the comparison value generated in step 406 of FIG. 4A between advertising and document, a<sub>j</sub>, is used to bias the user/advertising concept comparison value S<sub>i,j</sub> towards **advertising concepts which are more similar to the current document**. This combination for each advertising concept yields the final similarity measure used to rank the advertisements:

$$R_j = \left( \sum_i^m S_{ij} \right) \times a_j$$

[0049] If multiple advertisements with the same R<sub>j</sub> value are present, the a<sub>j</sub> value can be used to "break the tie," and the advertising concept with the higher score with respect to the document will be delivered to the user's browser. If R<sub>j</sub> does not exceed some threshold, e.g. 20% relevancy, the advertisements can be ranked using the original content based value a<sub>j</sub>. In this case, the better solution is to deliver an advertisement that is at least similar in content to the current document. Note that in the case where neither the R<sub>j</sub> value nor the a<sub>j</sub> value surpass a threshold, then either no advertisement is displayed, or other information in the advertisement area such as relevant headline news or news related to the user's profile can be displayed.

Paragraphs 0047-0049 note how advertisement concepts and user concepts can be compared to select an advertisement that is associated with "advertising concepts which are more

similar to the current document.” However, this portion of Graham still fails to disclose that a performance measure (e.g., an estimated click through rate) for an advertisement **is modified** using the “aggregate performance of advertisements that were presented with the document” and that correspond to the concept.

Thus, the disclosure of paragraphs 0032, 0039, and 0047-0049 of Graham fail to cure the deficiencies of Gerace. Additionally, neither Gerace nor Graham provides a teaching, suggestion, or motivation to modify the combination of Gerace and Graham to arrive at the subject matter of claim 109.

For at least the reasons provided above, Gerace, Graham, and combinations thereof fail to teach, describe, or otherwise suggest at least one element of claim 109. Accordingly, applicant requests reconsideration and withdrawal of the rejection of claim 109 and its dependent claims.

#### Claim 125

For at least the reasons provided with reference to claim 109, claim 125 is allowable over Gerace and Graham, which fail to teach, describe, suggest, or render obvious the elements of claim 125. Accordingly, applicant requests reconsideration and withdrawal of the rejection of claim 125 and its dependent claims.

#### Claim 141

For at least the reasons provided with reference to claim 109, claim 141 is allowable over Gerace and Graham, which fail to teach, describe, suggest, or render obvious the elements of claim 141. Accordingly, applicant requests reconsideration and withdrawal of the rejection of claim 141 and its dependent claims.

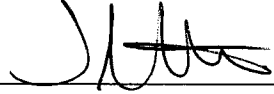
Applicant : Yingwei Claire Cui et al.  
Serial No. : 10/649,585  
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Page : 24 of 24

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Respectfully submitted,

Date: 8/16/10

  
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